

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	5	US-5851290-\$.did. or CN-1446961-\$.did. or JP-797714-\$.did. or EP-1229156-\$.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 12:59
S2	0	JP-0797714-\$.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:12
S3	2	JP-07097714-\$.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:13
S4	7	((LIWEN) near2 (ZHANG)).INV.	EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:27
S5	431	"8/94.11".CCLS.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 13:38
S6	1234	252/8.81,8.85.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:55
S7	0	S6 and (yarn with collagen with fiber with textile)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:55
S8	0	S6 and (yarn with collagen with textile)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:55
S9	0	S6 and (yarn with collagen)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:56

## EAST Search History (Prior Art)

S10	51	S6 and (yarn with (leather or animal or skin))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 13:58
S11	56	yarn with collagen with fiber with textile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 14:02
S12	3	("3616169").URPN.	USPAT	ADJ	ON	2009/07/02 14:29
S13	4	("1945173"   "3294581").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 14:32
S14	235	yarn with collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 16:03
S15	143	S14 and (animal or leather)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 16:04
S16	113	(yarn and collagen).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 16:05
S17	863	yarn same (collagen or (animal near2 fiber)) same (cotton or hemp or wool or silk or terylene or acrylic or nylon or polyamide or (viscose near staple))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:28
S18	192	yarn same collagen same (cotton or hemp or wool or silk or terylene or acrylic or nylon or polyamide or (viscose near staple))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:28
S19	99	yarn with collagen with (cotton or hemp or wool or silk or terylene or acrylic or nylon or polyamide or (viscose near staple))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:31

## EAST Search History (Prior Art)

S20	162	S17 same twist\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:44
S21	77	S18 and twist\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:44
S22	146	S20 and (textile or fabric)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 17:56
S23	121	S20 same (textile or fabric)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/02 18:00
S24	7	("1945173"   "3294581").PN. OR ("3616169").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 18:16
S25	1	yarn same (loosening or loosing) same (blend\$4) same (card\$4) same draw\$4 same twist\$4 same opener	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 19:17
S26	3	yarn same (loosening or loosing) same (blend\$4) same (card\$4) same draw\$4 same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 19:18
S27	9	yarn same (loosening or loosing) same (blend\$4) same draw\$4 same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 19:20
S28	13	yarn same (loosening or loosing) same (blend\$4) same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 19:23
S29	203	yarn same (loosening or loosing or loose\$4) same (blend\$4) same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/02 19:31
S30	341	57/243.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 12:51
S31	1	S30 and collagen	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 12:52
S32	52	S30 and loos\$7	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 12:53

## EAST Search History (Prior Art)

S33	20	("3312052"   "3358436"   "3477219"   "3482389"   "3487627"   "3535867"   "3657871"   "3685268").PN. OR ("3969885").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 13:23
S34	1	liming same deliming same (tanning or tanned or tan or chromed or chroming or softening) same (loosing or loosening or loose or separat\$4) same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 15:09
S35	10	(liming or lime or limed or \$4lime\$2) same (tanning or tanned or tan or chromed or chroming or softening) same (loosing or loosening or loose or separat\$4) same twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 15:11
S36	632	(liming or lime or limed or \$4lime\$2) and (tanning or tanned or tan or chromed or chroming or softening) and (loosing or loosening or loose or separat\$4) and twist\$4	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 15:30
S37	70	S36 and (yarn or fiber).ab.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 15:31
S38	44	S37 and yarn	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 15:50
S39	38	("2838363"   "3114372"   "3114593"   "3366440"   "3374103"   "3511904"   "3520402"   "3527225"   "3625811"   "3742955"   "4185011"   "4295894").PN. OR ("4404033").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 16:05
S40	13	("0611814"   "2374201"   "2475697"   "3114372").PN. OR ("3625811").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 16:25
S41	3412	carding machine	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 16:28
S42	122	carding machine same (drawing near2 machine)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 16:30
S43	42	S42 and yarn	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/07/06 16:31
S44	43	(rawhide or (raw near2 hide)) same (lime or liming or limed or chromed or chroming) same (deliming or delimed or delime)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/08 15:25

## EAST Search History (Prior Art)

S45	45	(ammonium near2 (sulfate or sulphate)) same protease same (hide or skin or pelt or leather)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/07/08 16:53
S46	129	(rawhide or (raw near2 hide) or leather or skin or (animal near2 fiber) or collagen or hide or (wet blue)) same (lime or liming or limed or deliming or delimed) same ((acid\$3 near2 protease) or protease)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/07 15:24
S47	29	("2741575"   "2741576"   "4019956").PN. OR ("4220724").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/08/07 16:03
S48	1	reciprocating liquid opener	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/17 09:53
S49	82	water same lipid same (leather or (animal near2 skin) or hide or rawhide)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/17 09:58
S50	7	("4767827"   "5055561"   "5154918"   "5344917"   "5412076"   "5683701").PN. OR ("6160096").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/08/17 10:12
S51	16	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) same ((calcium hydroxide) or CaOH) same ((sodium sulfate) or (sodium sulphate)) same ((sodium hydroxide) or NaOH)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/17 11:19
S52	2	US-3607609-\$.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/17 12:08
S53	25	("1790983"   "2249888"   "2640004"   "2757100"   "2973284"   "3014263"   "3063892"   "3071477"   "3179342"   "3232819"   "3303038"   "3364098").PN. OR ("3607609").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/08/17 12:08

## EAST Search History (Prior Art)

S54	421	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) with wind	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 12:26
S55	33	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) with wind with fiber	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 12:32
S56	622	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) with (wind or airflow or air) with fiber	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 12:46
S57	4	S56 with (loosen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 12:47
S58	30	S56 and (loosen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 12:50
S59	2	S56 with (sort\$4 or assort\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:19
S60	87	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) same (wind or airflow or air) same fiber same (loosen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:19
S61	3922	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) same (wind or airflow or air) same fiber	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:42

## EAST Search History (Prior Art)

S62	1177	S61 and ((mix\$4 near3 machine) or horizontal\$3 or blend)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:44
S63	594	S61 same ((mix\$4 near3 machine) or horizontal\$3 or blend\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:44
S64	401	S61 same ((mix\$4 near3 machine) or blend\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:45
S65	9	S64 and ((acid\$3 near3 protease) or protease or proteolytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 14:51
S66	34	S64 and ((acid\$3 near3 protease) or protease or proteolytic or enzyme)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 15:17
S67	34	S64 and ((acid\$3 near3 protease) or protease or proteolytic or enzym\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 15:17
S68	0	S61 same (ambient near2 water)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 15:44
S69	1	((ammonium sulfate) or (ammonium sulphate)) same protease same (water or H2O or H2O or ("H.sub.2" adj O)) same (lime or liming or deliming) same ((sodium hydroxide) or NaOH)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 15:54

## EAST Search History (Prior Art)

S70	7	((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same (water or H2O or H2O or ("H. sub.2" adj O)) same (lime or liming or deliming) same ((sodium hydroxide) or NaOH)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/19 15:57
S71	5	CN-1446961-\$.did. or US-5851290-\$.did. or JP-0797714-\$.did. or EP-1229156-\$.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 10:51
S72	3171	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) same acid\$3 same (protease or proteolytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 11:41
S73	851	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)) with acid\$3 with (protease or proteolytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 11:42
S74	793	S73 and collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 11:42
S75	10	S73 and collagen and yarn	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 11:42
S76	7	((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same (lime or liming or deliming) same ((sodium hydroxide) or NaOH)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:19
S77	645	((ammonium sulfate) or (ammonium sulphate)) and (protease or proteolytic or enzyme) and (lime or liming or deliming) and ((sodium hydroxide) or NaOH)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:22



## EAST Search History (Prior Art)

S78	189	S77 and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:23
S79	70	S77 and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:23
S80	6	(lime or liming or deliming) and (((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium hydroxide) or NaOH) same (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:39
S81	6	(lime or liming or deliming) and (((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:40
S82	7	(lime or liming or deliming) and (((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:41
S83	7	(lime or liming or deliming or de\$1liming) and (((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:50
S84	8	(lime or liming or deliming or de\$1liming or limed or delimed) and (((ammonium sulfate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:50

## EAST Search History (Prior Art)

S85	8	(lime or liming or deliming or de\$1liming or limed or delimed) and (((ammonium sulfate) or (ammonium near3 sul\$2ate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:54
S86	35	(((ammonium sulfate) or (ammonium near3 sul\$2ate) or (ammonium sulphate)) same (protease or proteolytic or enzyme) same ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 19:57
S87	1	("3930954").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/26 20:05
S88	4906	(((ammonium sulfate) or (ammonium near3 sul\$2ate) or (ammonium sulphate)) and (protease or proteolytic or enzyme) and ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 20:11
S89	241	(((ammonium sulfate) or (ammonium near3 sul\$2ate) or (ammonium sulphate)) and (protease or proteolytic or enzyme) and ((sodium near2 hydroxide) or NaOH)) and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue)).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 20:11
S90	169	S88 and collagen.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 20:13
S91	147	wringing machine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 20:31
S92	24	S91 and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 20:32

## EAST Search History (Prior Art)

S93	192	wringing near2 machine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:06
S94	30	S93 and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:06
S95	6	S94 not S92	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:07
S96	7	wringing with machine with water with content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:11
S97	60	wringing same machine same water same content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:13
S98	16	S97 and (rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:13
S99	17	("0810510"   "3654781"   "4055059"   "4280345"   "4333731"   "4559793"   "4643916"   "4888966"   "5000017"   "5238537"   "5868798"   "6174825"   "6371280"   "6387135"   "6428874"   "RE33034").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/08/26 23:25
S100	76	wringing same machine same content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:30

## EAST Search History (Prior Art)

S10 1	4	S100 and collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:30
S10 2	365451	(rawhide or (raw near2 hide) or leather or (animal near2 skin) or (animal near2 fiber) or collagen or hide or (wet blue))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:43
S10 3	804	S102 and (trapeziform or (gill box rotary) or (cutting machine))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:43
S10 4	66	S103 and collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:44
S10 5	9	S102 and ((trapeziform or (gill box rotary) or (cutting machine)) same (loosing or loosening))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:46
S10 6	38	S102 and ((trapeziform or (gill box rotary) or (cutting machine)) and (loosing or loosening))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:47
S10 7	74	S102 and ((trapeziform or (gill box rotary) or (cutting near2 machine)) and (loosing or loosening))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/26 23:52
S10 8	6	cotton mixing machine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:26

## EAST Search History (Prior Art)

S10 9	7	S102 and (cotton near3 (mixing or mixture or mix or mixed or blend or blended or blending) near3 machine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:29
S11 0	111	cotton mixing	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:32
S11 1	9	S110 and S102	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:32
S11 2	555	S102 and (collagen same fiber same blend\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:35
S11 3	189	S102 and (collagen with fiber with blend\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:35
S11 4	555	S102 same collagen same fiber same blend\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:39
S11 5	189	S102 with collagen with fiber with blend\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:40
S11 6	106	S102.ab. and (collagen with fiber with blend\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 00:42

## EAST Search History (Prior Art)

S11 7	47	(US-20070186352-\$ or US-20070269654-\$ or US-20030084954-\$ or US-20040194444-\$ or US-20080072628-\$ or US-20020104305-\$ or US-20040214309-\$ or US-20040149369-\$ or US-20040253678-\$ or US-20040073010-\$).did. or (US-5851290-\$ or US-3616169-\$ or US-5378469-\$ or US-6708529-\$ or US-3969885-\$ or US-4404033-\$ or US-5028695-\$ or US-4185011-\$ or US-3625811-\$ or US-6701704-\$ or US-6689172-\$ or US-5525509-\$ or US-4220724-\$ or US-6160096-\$ or US-5344917-\$ or US-3607609-\$ or US-3930106-\$ or US-5532217-\$ or US-6190904-\$ or US-4280345-\$).did. or (US-2387510-\$ or US-2107838-\$ or US-2747228-\$ or US-3388030-\$ or US-3071477-\$ or US-2988488-\$ or US-2342994-\$ or US-3314861-\$).did. or (EP-1229156-\$ or EP-1736577-\$).did. or (JP-07097714-\$).did. or (WO-0106045-\$ or WO-9614452-\$ or JP-07097714-\$ or WO-2005100655-\$ or JP-62062990-\$ or GB-1157031-\$).did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:39
S11 8	24	S117 and (tanning or tanned or tan or soften\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:39
S11 9	6	S117 and ((tanning or tanned or tan) same soften\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:40
S12 0	7	S117 and ((tanning or tanned or tan) and soften\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:50
S12 1	2	S120 and lipid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:50
S12 2	9	((tanning or tanned or tan) same soften\$4) same (emulsif7 or emulsion) same lipid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:54

## EAST Search History (Prior Art)

S12 3	48	(tanning or tanned or tan) same (emulsif7 or emulsion) same lipid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 13:57
S12 4	13	(tanning or tanned or tan) same (softening or soften) same lipid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:02
S12 5	1338	(cutting machine) same (three or "3") same cylinder	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:05
S12 6	90	S125 and (leather or collagen or fiber)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:05
S12 7	251	(cutting machine) same (three) same cylinder	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:07
S12 8	27	S127 and (leather or collagen or fiber)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:07
S12 9	3	((wringing or wrung) near5 machine) and (trapeziform or (gill box rotary) or (cutting machine))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:13
S13 0	44826	(trapeziform or (gill box rotary) or (cutting machine))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:16

## EAST Search History (Prior Art)

S13 1	1363	(trapeziform or (gill box rotary) or ((cutting machine) near4 cylinder))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:16
S13 2	1570	(trapeziform or (gill box rotary) or ((cutting machine) near6 cylinder))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:16
S13 3	1	S132 and collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:19
S13 4	2271	(trapeziform or (gill box rotary) or ((cutting machine) with cylinder))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:19
S13 5	1	S134 and collagen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:19
S13 6	58	S134 and (leather or hide or skin)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:20
S13 7	26	((wringing or wrung) near5 machine) same (leather or skin or collagen)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:24
S13 8	4	S137 and (lipid or fat or wax or sterol or vitamin or \$7lipid\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:29



## EAST Search History (Prior Art)

S13 9	3714	(trapeziform or (gill near2 box near2 rotary) or ((cutting machine) same cylinder))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:45
S14 0	96	S139 same (leather or collagen or fiber or hide)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:45
S14 1	10	S140 same (loos\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/08/27 14:50
S14 2	1	("3616169").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/06/07 14:57
S14 3	7	("1945173"   "3294581").PN. OR ("3616169").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/06/07 14:58
S14 4	30	tanned with chromed	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2010/06/11 16:42